

## CLAIMS

1. An offset correction circuit to correct DC offset in accordance with a data rate, comprising:

5 a detection circuit to detect a thermal asperity signal; and  
a filter circuit to respond to said thermal asperity signal in accordance with said data rate.

2. An offset correction circuit, as in Claim 1, wherein said filter circuit affects  
10 said DC offset in accordance with said data rate.

3. An offset correction circuit, as in Claim 1, wherein said filter circuit is a transconductance circuit.

4. An offset correction circuit, as in Claim 3, wherein said transconductance circuit shunts current in accordance with said data rate.

5. An offset correction circuit, as in Claim 3, wherein said transconductance circuit includes a FET to shunt current in accordance with said data rate.

6. A disk drive system for reading and writing information on a disk, comprising:

a head to read/write information on said disk;

a preamplifier to amplify said information; and

25 a read channel to process said amplified information, said read channel  
including:

an offset correct circuit to correct DC offset in accordance with a data rate,  
said offset correction circuit including:

a detection circuit to detect a thermal asperity signal; and

30 a filter circuit to respond to said thermal asperity signal in  
accordance with said data rate.

7. A disk drive system, as in Claim 6, wherein said filter circuit affects said DC offset in accordance with said data rate.

5 8. A disk drive system, as in Claim 6, wherein said filter circuit is a transconductance circuit.

9. A disk drive system, as in Claim 8, wherein <sup>said</sup>aid transconductance circuit shunts current in accordance with said data rate.

10 10. A disk drive system, as in Claim 8, wherein said transconductance circuit includes a FET to shunt current in accordance with said data rate.

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FOOTNOTES